

## Message

**From:** Hongsermeier, Randy L. [/O=NPPD/OU=CGO/CN=RECIPIENTS/CN=RLHONGS]  
**Sent:** 1/22/2013 2:25:37 PM  
**To:** Ackerman, Terry L. [tlacker@nppd.com]  
**CC:** Harris, Douglas D. [ddharri@nppd.com]; McCormick, Seth P. [spmccor@nppd.com]  
**Subject:** RE: Sutherland Plant Wells

I forgot about our regenerations of the demin system and polisher recoats.

25 anion regens x 40k = 1'000'000

8 cation regens X15k =120'000

8 mix bed regens X 15k =120'000

35 polisher recoats X 37'000 =1'295'000

Total=2'535'000 plus 268'056'000=270'591'000

**From:** Ackerman, Terry L.  
**Sent:** Tuesday, January 22, 2013 8:07 AM  
**To:** Hongsermeier, Randy L.  
**Cc:** Harris, Douglas D.; McCormick, Seth P.  
**Subject:** RE: Sutherland Plant Wells

Doug and Seth – Any questions on Randy's estimate for the Potable Wells? I assume we will need to apply some kind of adder to this number to account for outages and start-ups. Also, we will need to come up with an estimate for gallons pumped from the Diesel Fire Water Pump A-C during the year.

Terry

**From:** Hongsermeier, Randy L.  
**Sent:** Tuesday, January 22, 2013 7:58 AM  
**To:** Ackerman, Terry L.  
**Cc:** Harris, Douglas D.; McCormick, Seth P.  
**Subject:** RE: Sutherland Plant Wells

On a average makeup water for the potable water that the plant uses is approx 300 gallons per minute. This figure is when the RO is off and both potable tanks are full and water level dropping. This is with four circ pumps running and average daily water usage of the plant at noon. On a average with both units operating NORMAL the usage is approx 100 to 110 gallons per minute. With that being said and on the HIGH side with no unit outages and start ups. Here are my numbers.

300 gallons per minute X 60=18k per hr X 24 hours per day=432K X 365 days per year=157'680'000

105 gallons per minute X 60=6300 per hr X 24 hours per day=151200 X365 days per year=55'188'000

55'188'000 per day for RO reject

Total=268'056'000 per year

**From:** Ackerman, Terry L.  
**Sent:** Friday, January 18, 2013 2:57 PM  
**To:** Shafer, Jeffrey T.; Harris, Douglas D.  
**Cc:** Hongsermeier, Randy L.; McCormick, Seth P.  
**Subject:** RE: Sutherland Plant Wells

Doug – Please look me up next week to discuss options for coming up with an estimate. We may need the Water Plant and/or Seth's help on this.

Jeff – I am assuming our estimate will be fairly rough given the sources of information we have available to develop it. Any guidance on how the estimate should be prepared; should it be conservative (on the high side to envelope what we pump), or should it be reflective of what we believe to be the actual amounts pumped (actual amount pumped could be either greater or less than the estimated amount)?

Terry

**From:** Shafer, Jeffrey T.  
**Sent:** Friday, January 18, 2013 1:10 PM  
**To:** Ackerman, Terry L.; Harris, Douglas D.  
**Cc:** Barels, Brian L.  
**Subject:** Sutherland Plant Wells  
**Importance:** High

Doug and Terry,

On February 11<sup>th</sup>, I will be meeting with Twin Platte NRD staff to work on industrial well reporting from our wells around Sutherland. I have gotten data for all of the wells that we use for cooling purposes, but still have nothing for the plants wells. I believe that if we can make a reasonable estimate of the annual usage from the 4 wells, the NRD will be fine with whatever we come up with. If you have any data related to hours pumped, electrical usage by the wells, gallons of diesel fuel, or anything else that could be used to estimate total pumping I need it by February 5<sup>th</sup>.

If NPPD cannot make a reasonable estimate of pumping the NRD may force us to put meters on our wells! The NRD Board has already instructed NRD staff to contact other industrial users in the NRD and request meters be put on.

It is very important that you provide me any information you can by the 5<sup>th</sup>. Feel free to call me to discuss if you have any questions.

Thanks,

Jeff

